

Title (en)

Methods for reducing inhibition of nucleic acid amplification reactions

Title (de)

Verfahren für die Reduzierung der Inhibierung von Nucleinsäure-Amplifikations-reaktionen

Title (fr)

Procédé pour la réduction d'inhibition de réactions d'amplification d'acides nucléiques

Publication

EP 0770689 A3 19980225 (EN)

Application

EP 96114814 A 19960916

Priority

US 53560595 A 19950928

Abstract (en)

[origin: EP0770689A2] It has been found that certain glycoproteins, particularly mucins, are inhibitors of nucleic acid amplification reactions and that inhibition of the amplification reaction is associated with partial degradation of the carbohydrate chain. Partial degradation of the carbohydrate of a non-inhibitory glycoprotein renders it inhibitory, and partial degradation of the carbohydrate of a slightly inhibitory glycoprotein makes it more inhibitory. Sample processing prior to amplification may contribute to partial degradation of the carbohydrate chains of the glycoproteins which are present and increase their inhibitory effect. In contrast, complete removal of the carbohydrate significantly reduces or completely eliminates the inhibitory effect. Methods for reducing or eliminating glycoprotein-associated inhibition of nucleic acid amplification reactions are also disclosed.

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C12Q 1/68

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [X] EP 0624643 A2 19941117 - BECTON DICKINSON CO [US]
- [A] WO 9506652 A1 19950309 - PROMEGA CORP [US]
- [PX] WO 9527076 A1 19951012 - CORNING CLINICAL LAB INC [US]
- [X] STRAUB ET AL.: "Detection of naturally occurring enteroviruses and hepatitis A virus in undigested and anaerobically digested sludge using the polymerase chain reaction.", CANADIAN JOURNAL OF MICROBIOLOGY, vol. 40, no. 10, October 1994 (1994-10-01), pages 884 - 888, XP002050405

Cited by

EP0915171A3; EP0832897A3; EP0851032A1; EP0854195A1; EP0937780A1; US9822404B2; US6210881B1; WO2014072367A1; WO2005068626A1; WO2005068628A3; US6660472B1; US11021736B2; US11104896B2; US6241980B1; US6265224B1; EP1017784B1

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